Use modified primers in PCR

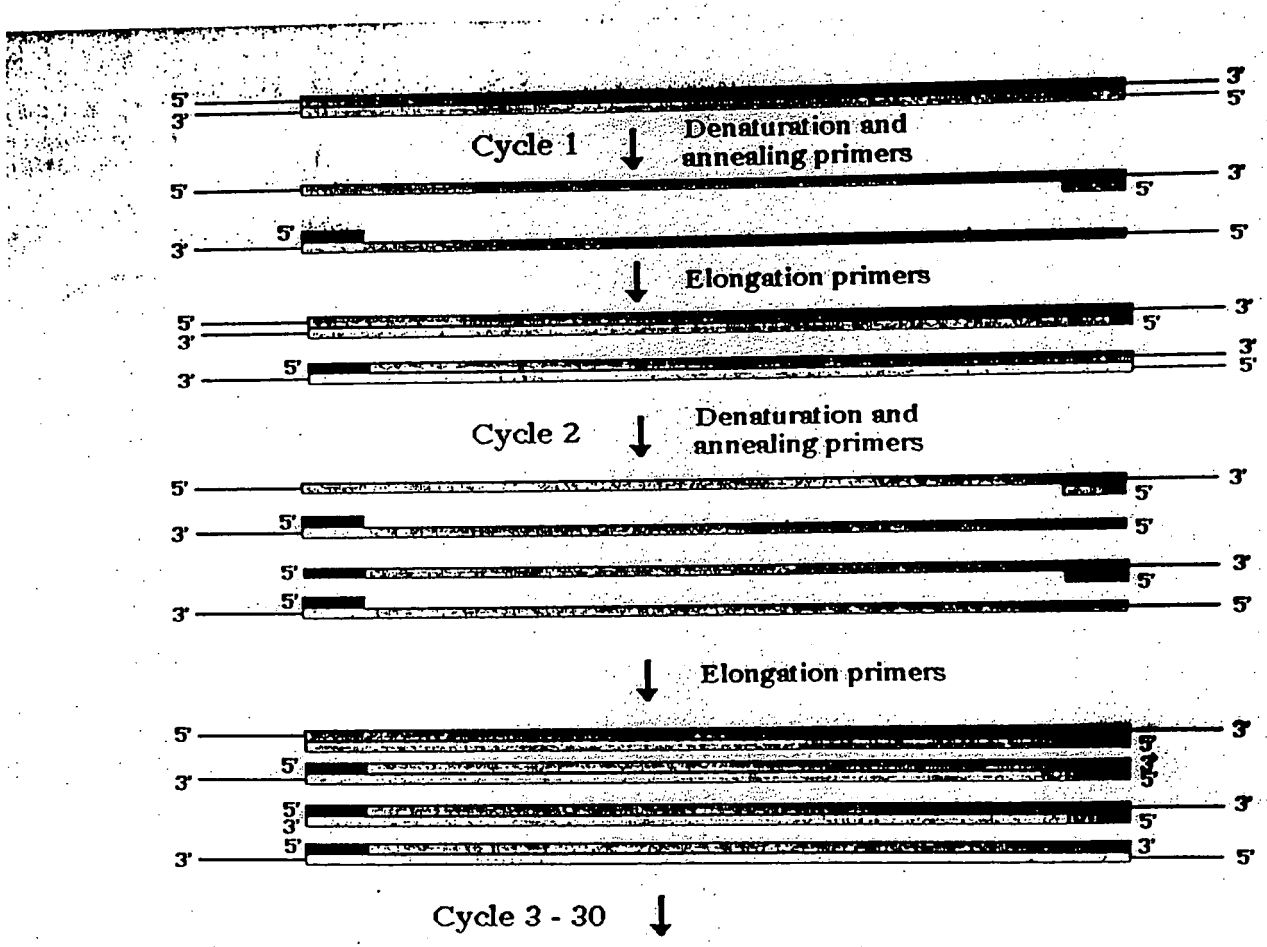
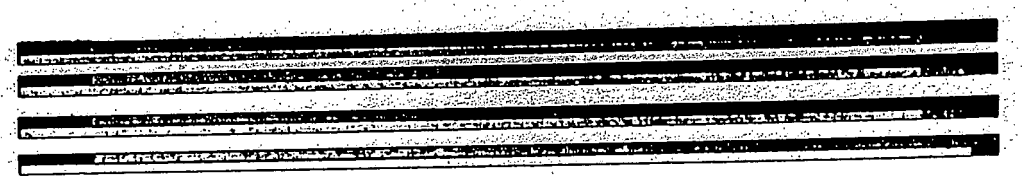


Fig. 1

After PCR the end of primer can be removed



Treatment to remove end of primer segment

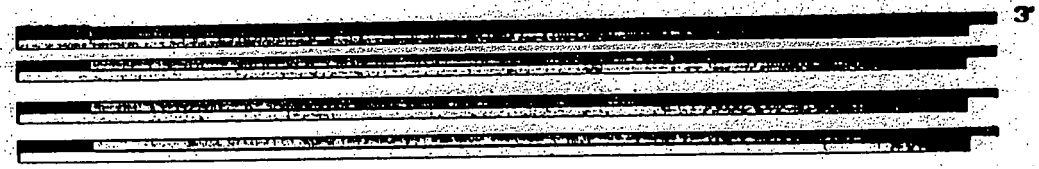
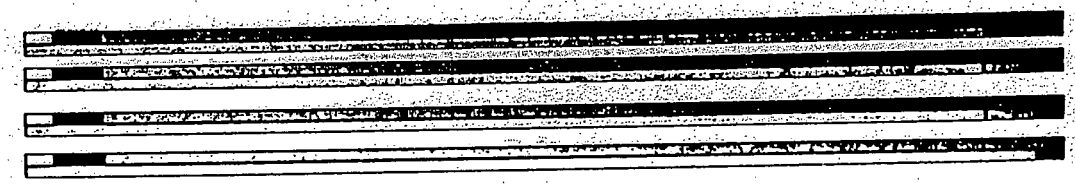


Fig. 2

The protruding ends can be made at one or both ends of the PCR fragment



Treatment to remove end of primer segment

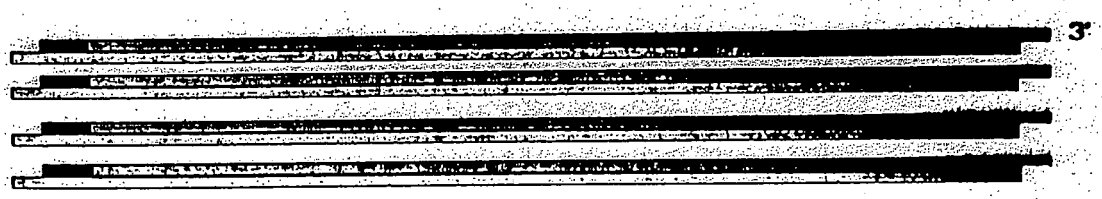


Fig. 3

A biotin can be attached to the end of a DNA fragment then ligations can be done sequentially with the DNA attached to the bead

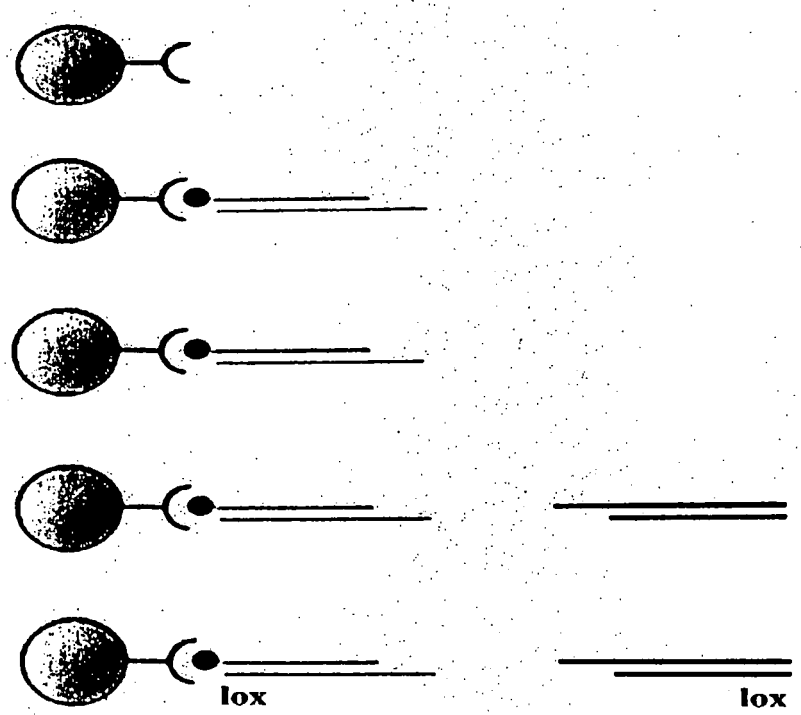


Fig. 4

Using an enzyme system to remove the DNA from the bead and circularize it

- By introducing a lox site in the DNA near the ends the DNA can be acted upon by the cre recombination enzyme
- By having replication and selection functions on the DNA between the lox sites the circularized DNA will form a functional plasmid capable of transforming cells

Fig. 5